



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN - 3 2010

REPLY TO THE ATTENTION OF:

AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

George Bradley
Manager of Health, Safety, and Environmental
Indiana Harbor Coke Company
3210 Watling Street
East Chicago, Indiana 46312

Re: Notice and Finding of Violation at Indiana Harbor Coke Company, East Chicago

Dear Mr. Bradley:

This is to advise you that the U.S. Environmental Protection Agency has determined that Indiana Harbor Coke's facility at 3210 Watling Street, East Chicago, Indiana, is in violation of the Clean Air Act (CAA) and the Indiana State Implementation Plan (SIP). A list of the requirements violated is provided below. We are today issuing you a cover letter to accompany the Notice of Violation and Finding of Violation (NOV/FOV) issued May 13, 2010.

Indiana Harbor Coke's Title V permit contains operational limitations and emissions limits for, among other things, particulate matter (PM), particulate matter 10 (PM10), and sulfur dioxide (SO₂). The purpose of these emissions limits is to help protect the public from unhealthy exposures to criteria pollutants, emissions of which contribute to respiratory problems, lung damage and premature deaths.

Based on data submitted to EPA on June 11, 2009, Indiana Harbor Coke has violated and continues to violate provisions in its permit that govern recordkeeping standards and bypass venting from its coke batteries. Violation of these requirements is also a violation of the Indiana State Implementation Plan (SIP), as well as Title I, Part C of the CAA and its associated regulations, which require compliance with the terms and conditions of Title V permits.

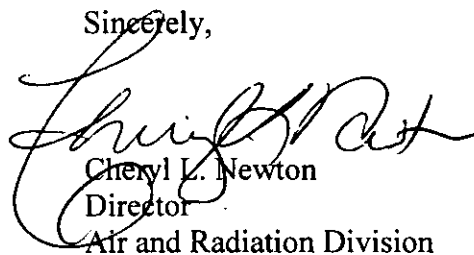
Section 113 of the CAA gives us several enforcement options. These options include: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action.

Section 113 of the CAA provides you with the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice and any conference should be held within 30 days following

receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent you at this conference.

EPA's contact in this matter is Gina Harrison. You may call her at (312) 353-6956 if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Indiana Harbor Coke Company's compliance with the requirements of the CAA.

Sincerely,

A handwritten signature in cursive script, appearing to read "Cheryl L. Newton", is written over the typed name and title.

Cheryl L. Newton
Director

Air and Radiation Division

Enclosure

cc: Michael Hall, Northwest Regional Office

**United States Environmental Protection Agency
Region 5**

IN THE MATTER OF:

Indiana Harbor Coke Company
East Chicago, Indiana

Proceedings Pursuant to
the Clean Air Act,
42 U.S.C. §§ 7401 et seq.

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(**FINDING OF VIOLATION**
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NOTICE AND FINDING OF VIOLATION

This Notice and Finding of Violation (Notice) is issued to Indiana Harbor Coke Company for violations of the Clean Air Act (Act), 42 U.S.C. §§ 7401 *et seq.*, and the Indiana State Implementation Plan (SIP) at the Indiana Harbor Coke Company Plant in East Chicago, Indiana (facility).

This Notice is issued pursuant to Sections 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (3). The authority to issue this Notice has been delegated to the Regional Administrator of EPA Region 5, and redelegated to the Director, Air and Radiation Division.

A. STATUTORY AND REGULATORY BACKGROUND

Indiana State Implementation Plan

1. Section 110 of the Act, 42 U.S.C. § 7410, requires states to adopt, and submit to EPA for approval, SIPs providing for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS) promulgated by EPA pursuant to Section 109 of the Act, 42 U.S.C. § 7409. EPA has promulgated NAAQS for, among other pollutants, particulate matter (PM) and sulfur dioxide (SO₂).
2. Pursuant to 40 C.F.R. § 52.23, failure to comply with any approved regulatory provision of a SIP, or with any permit condition issued pursuant to approved or promulgated regulations for the review of new or modified stationary or indirect sources, renders the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under Section 113 of the Act, 42 U.S.C. § 7413.

3. On May 3, 1990, the Administrator of EPA approved 326 IAC Rule 1-6 as part of the federally enforceable SIP for the State of Indiana. 55 *Fed. Reg.* 18604. 326 IAC 1-6 regulates general provisions, including but not limited to malfunctions at stationary sources, scheduled maintenance, and reporting.
4. 326 IAC 1-6-2 requires sources to report malfunctions as soon as practicable, but in no event later than four daytime business hours after the beginning of the occurrence.
5. On November 14, 1995, the Administrator of EPA approved 326 IAC Rule 2-7 as part of the federally enforceable SIP for the State of Indiana. 60 *Fed. Reg.* 57188. 326 IAC 2-7-16, which was approved as helping to satisfy Indiana's Title V requirements, states that "this emergency provision supersedes any emergency or upset provision contained in 326 IAC 1-6 for sources subject to this rule after the effective date of this rule." Section 16(d).
6. 326 IAC 2-7-16 (b) (1) – (6) set forth the notification provisions required by a Title V permittee in the case of an emergency resulting in a federal or state health-based emission limitation exceedance.

Title V Requirements

7. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. On December 4, 2001, EPA granted Indiana final approval of its Title V Clean Air Act Permit Program, effective November 30, 2001.
8. Section 502(b) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.
9. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

10. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), authorizes EPA to promulgate regulations establishing emission standards for particular industrial sources that emit one or more of the Hazardous Air Pollutants (HAPs) listed in Section 112(b) of the Act in significant quantities.
11. On October 27, 1993, EPA promulgated the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Coke Oven Batteries (Subpart L) at 40 C.F.R. § 63.300-313. Subpart L applies to existing nonrecovery coke oven batteries at a coke plant that exists on or after December 31, 1995.

12. 40 C.F.R. Part 63, Subpart L, defines an affected source as a new or existing coke oven battery constructed on or before December 31, 1995.
13. 40 C.F.R. § 63.310(a) provides that at all times including periods of startup, shutdown, and malfunction, the owner or operator shall operate and maintain the coke oven battery and its pollution control equipment required under this subpart, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under this subpart.
14. On April 14, 2003, EPA promulgated the NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks at 40 C.F.R. Part 63, Subpart CCCCC. Subpart CCCCC applies to owners or operators of a coke oven battery at a coke plant this is (or is part of) a major source of HAP emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. 40 C.F.R. § 63.7282.
15. 40 C.F.R. Part 63, Subpart CCCCC, defines an affected source as a new or existing coke oven battery constructed on or before July 3, 2001.
16. 40 C.F.R. § 63.7300(a) states, "as required by § 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart."
17. 40 C.F.R. § 63.6(e)(1)(i) requires that at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
18. Indiana Department of Environmental Management (IDEM), delegated authority by EPA, issued to Indiana Harbor Coke Construction Permit 089-9236-00382 on February 26, 1998, modified Construction Permit 089-14241-00382 (Construction Permit) on November 30, 2001, and Title V Operating Permit T089-11311-00382 (Title V Permit) on September 22, 2006. The Title V Permit incorporates all limits and operational constraints set forth in the Construction Permit.
19. Part D.1.11(a)(5) of the Indiana Harbor Coke Title V Permit limits annual combined SO₂ emissions from stack 201 and bypass vents to 1,656 pounds of SO₂ per hour (lbs/hr), averaged over 24 hours.
20. Part D.1.11(b) of the Title V Permit limits bypass venting to 19% of total waste gas from the common tunnel, per 24-hour period.
21. Part D.1.5(b) of the Title V Permit limits condensable and filterable PM emissions per vent stack to 11.875 lbs/hr, averaged over a 24-hour period.

22. Part D.1.5(c) of the V Permit Title V Permit limits annual combined PM emissions from stack 201 and bypass vents to 86.1 pounds of PM per hour (lbs/hr), averaged over 24 hours.

Factual Background

23. Indiana Harbor Coke Company (Indiana Harbor Coke) owns and/or operates a heat recovery metallurgical coke plant at 3210 Watling Street, East Chicago, Indiana (facility).
24. The facility is classified as a major stationary source as that term is defined at 40 C.F.R. § 51.166(i)(4)(ii).
25. Indiana Harbor Coke constructed its coke oven battery in 1998.
26. EPA sent an information request to Indiana Harbor Coke on May 11, 2009, requesting, among other things, data detailing total bypass venting, continuous emissions monitoring systems (CEMS) operation, and deviations of Title V permit requirements.
27. Indiana Harbor Coke responded to the information request on June 11, 2009, June 19, 2009, July 21, 2009, August 14, 2009, and September 11, 2009, and reported 277 hours of bypass venting above the permitted 19% daily limit, 160 excess tons of SO₂, and 15.9 excess tons of PM emitted from the bypass vent stacks since January 2005. See Tables A and B.
28. Indiana Harbor Coke's April 19, 2008 Compliance Demonstration Report showed an average PM emission rate of 21.502 pounds per hour coming from the A2 waste heat stack.
29. Indiana Harbor Coke did not retest the A2 waste heat stack, but tested the B vent waste heat stack on June 11, 2008, and recorded a PM emission rate of 10.998 pounds per hour.
30. In its June 11, 2009 response to EPA, Indiana Harbor Coke indicated it had not informed Indiana Department of Environmental Management (IDEM) of 22 deviations from 24-hour permit requirements, which occurred in 2005, 2006, and 2007.¹

Violations of Emissions Limits and Operating Standards

31. Indiana Harbor Coke's bypass venting at its 16 bypass vent stacks in excess of its 19% limit since 2005 violates the operational standards of its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), the Indiana SIP at 326 2-7-16, and 40 C.F.R. §§ 63.6(e)(1)(i), 63.310(a) and 63.7300(a).
32. Indiana Harbor Coke's excess SO₂ emissions from its 16 bypass vent stacks since 2005 violate its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), 40 C.F.R. §

¹ Indiana Harbor Coke submitted emergency and/or malfunction reports for 58 out of 80 daily exceedances of permit limits since 2005.

70.7(b), the Indiana SIP at 326 IAC 2-7-16, and 40 C.F.R. §§ 63.6(e)(1)(i), 63.310(a) and 63.7300(a).

33. Indiana Harbor Coke's excess PM emissions from its 16 bypass vent stacks since 2005 violate its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), the Indiana SIP at 326 IAC 2-7-16, and 40 C.F.R. §§ 63.6(e)(1)(i), 63.310(a) and 63.7300(a).
34. Indiana Harbor Coke's excess PM emissions from its A2 bypass vent stack since April 29, 2008 violate its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), the Indiana SIP at 326 IAC 2-7-16, and 40 C.F.R. §§ 63.6(e)(1)(i), 63.310(a) and 63.7300(a).
35. Indiana Harbor Coke's failure to report all exceedances and malfunctions to IDEM from 2005 - 2007 violated its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), 40 C.F.R. § 70.7(b), and the Indiana SIP at 326 IAC 2-7-16.
36. Indiana Harbor Coke's practice of certifying compliance in its quarterly Title V deviation reports when malfunctions and/or emergencies have led to exceedances of permit limits violate its Title V Permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

Environmental Impact of Violations

37. Excess emissions of SO₂ increase the amount of acid rain and public exposure to unhealthy levels of SO₂. SO₂ reacts with other chemicals in the air to form tiny sulfate particles. Long term exposure to high levels of SO₂ gas and particles can cause respiratory illness, aggravate existing heart disease, and lead to premature death.
38. Violations of particulate emissions standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

5/13/10
Date



Cheryl L. Newton
Director
Air and Radiation Division

Table A: Total hours of excess bypass venting and PM emissions recorded at Indiana Harbor Coke since 2005.

Venting and PM			
Month-Year	Hours Exceeding 24-hour Venting Limit of 19%	Total PM Over Limit	Total PM Over Limit
	Hours	lbs	Tons
Jan-04	1.24	12.100	0.00605
Mar-04	16.28	1033.125	0.51656
Apr-04	0.57	2.604	0.00130
May-04	3.86	117.899	0.05895
Jul-04	8.04	395.889	0.19794
Oct-04	0.01	0.002	0.00000
Apr-05	21.03	1175.756	0.58788
Sep-05	34.10	1865.191	0.93260
Mar-06	3.57	29.094	0.01455
Apr-06	2.45	44.204	0.02210
Nov-06	36.51	4168.994	2.08450
Dec-06	0.69	3.727	0.00186
Oct-07	0.01	0.002	0.00000
Jun-08	0.13	0.139	0.00007
Oct-08	91.18	13348.200	6.67410
Nov-08	1.71	11.137	0.00557
Dec-08	1.07	6.278	0.00314
Jan-09	2.30	11.234	0.00562
Feb-09	4.05	32.471	0.01624
Mar-09	1.08	4.853	0.00243
Apr-09	1.53	5.289	0.00264
Sep-09	75.16	11057.982	5.52899
Oct-09	0.38	1.124	0.00056
Total	231.41	22268.188	16.66365

Table B:
Excess SO₂ Emissions from Bypass Vents.

SO2 Emissions				
Date	Total SO2 (lbs/hr)	Amount above 1656 lb/hr limit (lbs/hr)	Emissions above SO2 limit (lbs)	Emissions above SO2 limit (tons)
4/8/2005	2213	557	13368	6.684
4/13/2005	1731	75	1800	0.9

4/14/2005	2213	557	13368	6.684
4/15/2005	2262	606	14544	7.272
4/16/2005	2122	466	11184	5.592
5/11/2005	1703	47	1128	0.564
5/13/2005	2175	519	12456	6.228
5/14/2005	1850	194	4656	2.328
9/12/2005	2369	713	17112	8.556
9/13/2005	2662	1006	24144	12.072
9/14/2005	2595	939	22536	11.268
9/15/2005	2640	984	23616	11.808
9/16/2005	1815	159	3816	1.908
9/19/2005	1986	330	7920	3.96
9/20/2005	1704	48	1152	0.576
4/29/2006	1658	2	48	0.024
8/2/2006	1711	55	1320	0.66
11/3/2006	2228	572	13728	6.864
11/4/2006	2252	596	14304	7.152
11/5/2006	1972	316	7584	3.792
11/7/2006	1690	34	816	0.408
2/2/2007	1677	21	504	0.252
8/20/2007	1660	4	96	0.048
12/13/2007	1672	16	384	0.192
12/27/2007	1714	58	1392	0.696
12/28/2007	1660	4	96	0.048
1/5/2008	1684	28	672	0.336
4/14/2008	1801	145	3480	1.74
8/26/2008	1705	49	1176	0.588
10/6/2008	2742	1086	26064	13.032
10/7/2008	2443	787	18888	9.444
10/8/2008	2591	935	22440	11.22
10/9/2008	2609	953	22872	11.436
10/10/2008	2128	472	11328	5.664

CERTIFICATE OF MAILING

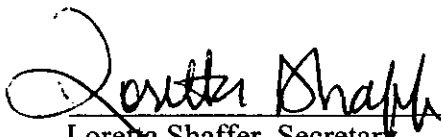
I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-10-IN-13, by Certified Mail, Return Receipt Requested, to:

Indiana Harbor Coke Company
George Bradley
3210 Watling Street
East Chicago, Indiana 46312

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Michael Hall
Northwest Regional Office
Indiana Department of Environmental Management
8380 Louisiana Street
Merrillville, Indiana 46410-9201

on the 14 day of May, 2010


Loretta Shaffer, Secretary
AECAS, MN-OH

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0192 0577